

MANOYLOV, V. Ye., kand. tekhn. nauk, detsent; MYAZDRIKOV, O. A.,
kand. tekhn. nauk, detsent

Electrets and some possible practical uses. Izv. LETI 59
no.46:280-288 '62. (MIRA 15:10)

(Electrets)

MYAZDRIKOV, O. A., kand. tekhn. nauk, dotsent

Adsorptive charge component of an electret. Izv. LETI 59
no.46:289-293 '62. (MIRA 15:10)

(Electrets)

MYAZDRIKOV, O. A., kand. tekhn. nauk, dotsent

Memory mechanism of an electret detector in integral operation.
Isv. LETI 59 no.46:294-299 '62. (MIRA 15:10)

(Electrets) (Gamma rays—Measurement)

MYAZDRIKOV, O. A., kand. tekhn. nauk, dotsent

High-voltage converter based on fission reaction. Izv. LETI 59
no. 46:340-343 '62. (MIRA 15:10)

(Electrochemistry)

MYAZI REVIEW, 1964.

Pulse method of polarimetric analysis. Rev. Libr. #
no. 51584-586 1964. -MPC 27-5.

I. Increasingly difficult aviate. These permanent memory.

I. 05645-67 FWT(m) LJP(c)
ACC NR: AP6018363

SOURCE CODE: UR/0089/66/020/005/0442/0444

AUTHOR: Myazdrikov, O. A.; Demidovich, V. N.; Suslov, A. P.

ORG: none

TITLE: Ionization-mechanical detector for ionizing radiation 10

SOURCE: Atomnaya energiya, v. 20, no. 5, 1966, 442-444

TOPIC TAGS: ionization detector, ionizing radiation, capacitor

ABSTRACT: The detector is based on an electromechanical diode invented by the author (Author's Certificates nos. 155049 and 168805), wherein a small charged body is made to oscillate between the electrodes of a capacitor and exchange charge alternately between the capacitor plates (Fig. 1). The body employed is a sphere of polystyrene (type PS-5B) coated with graphite to make its surface conducting. Relations are established between the electrode voltage, interelectrode distance, diameter of the body, and the weight of the body. Application of ionizing radiation reduces the natural frequency of the oscillations and can be used to determine the number of ionizing particles. The detector was calibrated against γ radiation from cobalt at a dose intensity from zero to 380 r/sec and calibration curves for this range are presented. At dose intensities above 50 r/sec the relation between the oscillation frequency and the dose intensity is parabolic. It is proposed that the ionization-mechanical detector can solve some special problems in the measurement of large radiation fluxes of different types, especially low-energy radiation. Orig. art. has: 2 figures and 1 table.

47

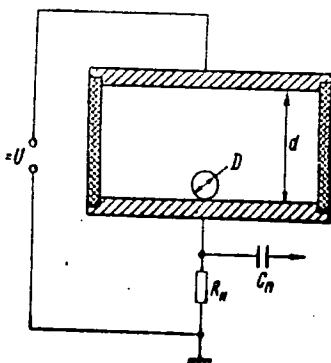
B

Card 1/2

UDC: 621.376.577.391

I 05645-67
ACC NR: AP6018363

Fig. 1. Diagram of detector.



9 formulas.

SUB CODE: 20/ SUBM DATE: 16Oct65/ ORIG REF: 003/ OTH REF: 001

Card 2/2 egh

L 11423-67 ENT(1) IJP(c) GG
ACC NR: AP6031274

SOURCE CODE: UR/0057/66/036/009/1703/1705

AUTHOR: Yekimova, N. F.; Myazdrikov, O. A.; Nikolayev, O. S.

ORG: Leningrad Institute of Aviation Instrument Design (Leningradskiy institut aviatcionnogo priborostroyeniya)

4/1

TITLE: Mechanical excitation of a suspension of phosphors in a solid dielectric and the theory of impact

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 9, 1966, 1703-1705

TOPIC TAGS: triboluminescence, impact stress, elastic deformation, elastic modulus

ABSTRACT: Two of the present authors and collaborators (ZhTF, 35, No 7, 1319-1320, 1965) have previously dropped solid spheres onto a dielectric slab containing suspended phosphorescent material and noted that the intensity of the resulting flash is proportional to the kinetic energy of the sphere at the moment of impact. In the present paper the authors employ the theory of impact expounded by A.N.Dinnik (Izbrannyye trudy AN UkrSSR, Kiyev, 1952) to calculate the duration of impact and the energy expended in compressing the dielectric slab in terms of the elastic moduli of both materials, the radius and density of the sphere, and the velocity of impact. It is suggested that the ratio of the intensity of the flash to the energy expended in compressing the dielectric slab will provide a better index of the triboluminescence behavior of the suspended phosphor than will the ratio of the flash intensity to the

Card 1/2

UDC: 533.378

L 11423-67

ACC NR: AP6031274

total impact energy. When the duration of the impact exceeds that of the afterglow the flash should exhibit two intensity peaks, of which one is excited by the compression of the dielectric slab and the other by its subsequent relaxation. An oscillogram is presented which shows such an intensity curve with two peaks. The 4 to 5 microsecond delay between the two peaks is in good agreement with the calculated duration of the impact. Orig. art. has: 10 formulas and 1 figure.

SUB CODE: 20 SUBM DATE: 29Sep66 ORIG. REF: 002

Card 2/2 bab

L 35056-65 EWT(m) IJP(c)
ACCESSION NR: AP5009170

S/0286/65/000/005/0053/0053

19

B

AUTHORS: Myazdrikov, O. A.; Demidovich, V. N.

TITLE: An ionization-mechanical chamber for recording nuclear radiation. Class 21,
No. 168805

SOURCE: Byulleten' izobreteniij i tovarnykh znakov, no. 5, 1965, 53

TOPIC TAGS: ionization chamber, nuclear radiation, electric field

ABSTRACT: This Author Certificate presents an ionization-mechanical chamber for recording nuclear radiation. It consists of a system of positive and negative electrodes. To acquire an ionization current in the pulse signal, the frequency and amplitude of which are functions of radiation intensity, a spherical particle with a conducting surface is placed between the electrodes. This particle oscillates between the electrodes through the effect of the electrical force field and the force of gravity. For measuring in an air-equivalent environment or in air, the particle introduced between the electrodes is suspended by a fiber of insulating material, and the oscillation is attained through the effect of the electrical force field (see Fig. 1 on the Enclosure). For measuring the intensity of neutron flux, a layer of material fissionable by neutron bombardment (such as U²³⁵) is spread on the Card 1/§1

L 35056-65
ACCESSION NR: AP5008170

walls of the chamber between the electrodes. Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 28Dec63

ENCL: 01

SUB CODE: NP, IE

NO REF SOV: 000

OTHER: 000

Card 2/3

L 60357-65 EWT(1)/EPA(1)-2/EWT(1)/ERF(1)/ERF(1) PI-7/F1-4 IJP(c)

JD/GG

ACCESSION NR: AP5018315

UR/0057/65/035/007/1319/1320

535.378

AUTHOR: Myazdrikov, C. A.; Nikolayev, O. S.; Pustoshkin, B. N.; Trofimov, V. M.

TITLE: Experimental investigation of mechanical excitation of phosphor suspensions in solid dielectrics

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 7, 1965, 1319-1320

TOPIC TAGS: triboluminescence, luminescent material, mechanical stress, zinc sulfide

ABSTRACT: The authors have dropped steel balls onto the back side of electro-luminescent panels and observed the resulting flashes with a photomultiplier. The flashes were approximately exponential with a rise time of 10^{-4} sec and a decay time of 10^{-3} sec. The flash intensity was proportional to the energy of the ball at impact, the proportionality constant depending on the nature of the phosphor and the dielectric in which it is suspended, and on the type of photomultiplier employed and its operating conditions. Data are presented graphically for a ZnS phosphor activated with 0.8% Mg and 0.1% Cu and suspended in a 59

Card 1/2

I-60357-65

2.

ACCESSION NR: AP5018315

micron thick polystyrene film. It is concluded that an impact energy of 0.2 erg could be detected. Varying the temperature from - 40 to + 50°C did not affect the results. "The authors thank Professor D.N.Nasledov for discussing the results and for advice in planning further investigations." Orig. art. has: 1 formula and 1 figure.

ASSOCIATION: Leningradskiy institut aviationskogo priborostroyeniya (Leningrad Institute of Aviation Instruments)

SUBMITTED: 15 Sep 64

ENCL: 00

SUB CODE: SS, OP

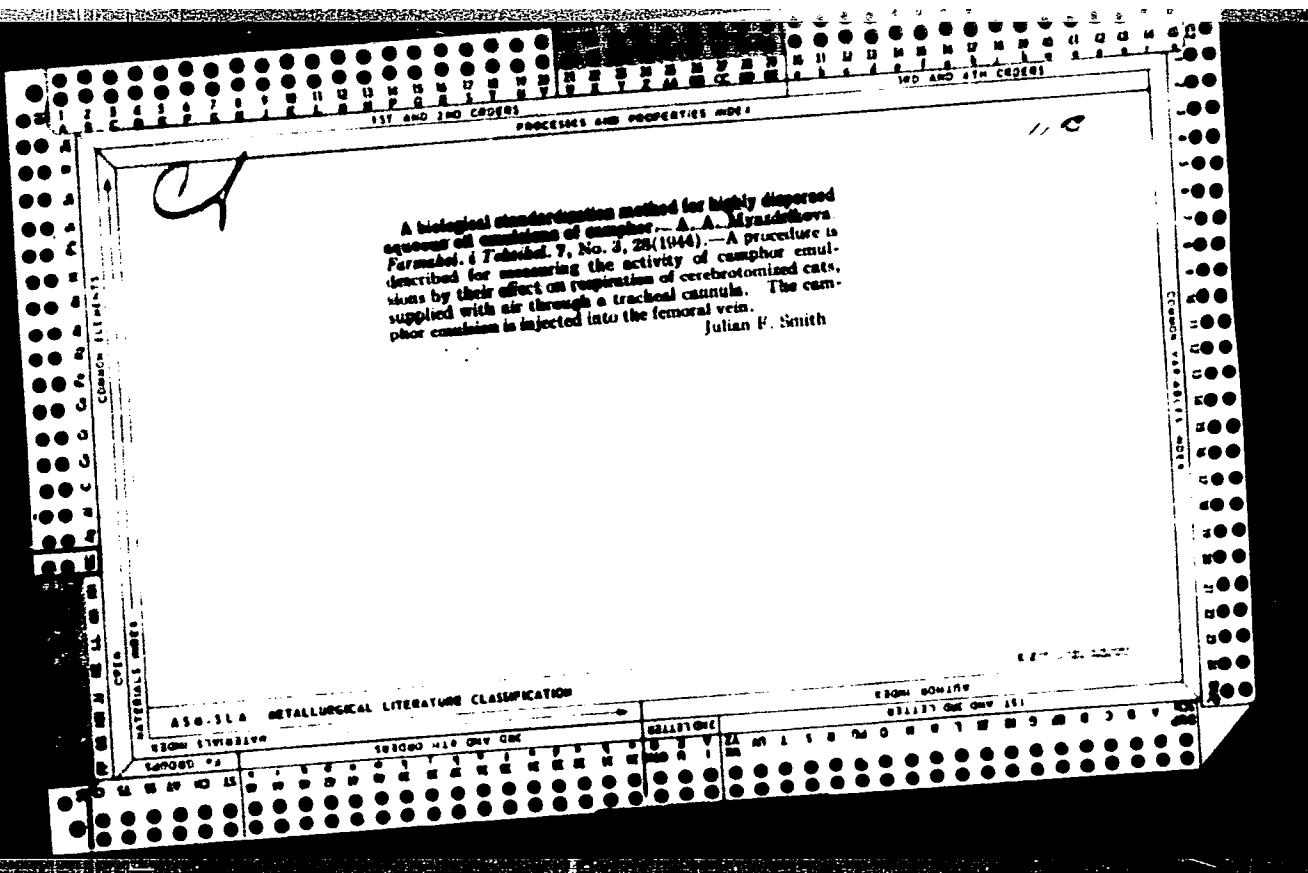
NO REF SOV: 001

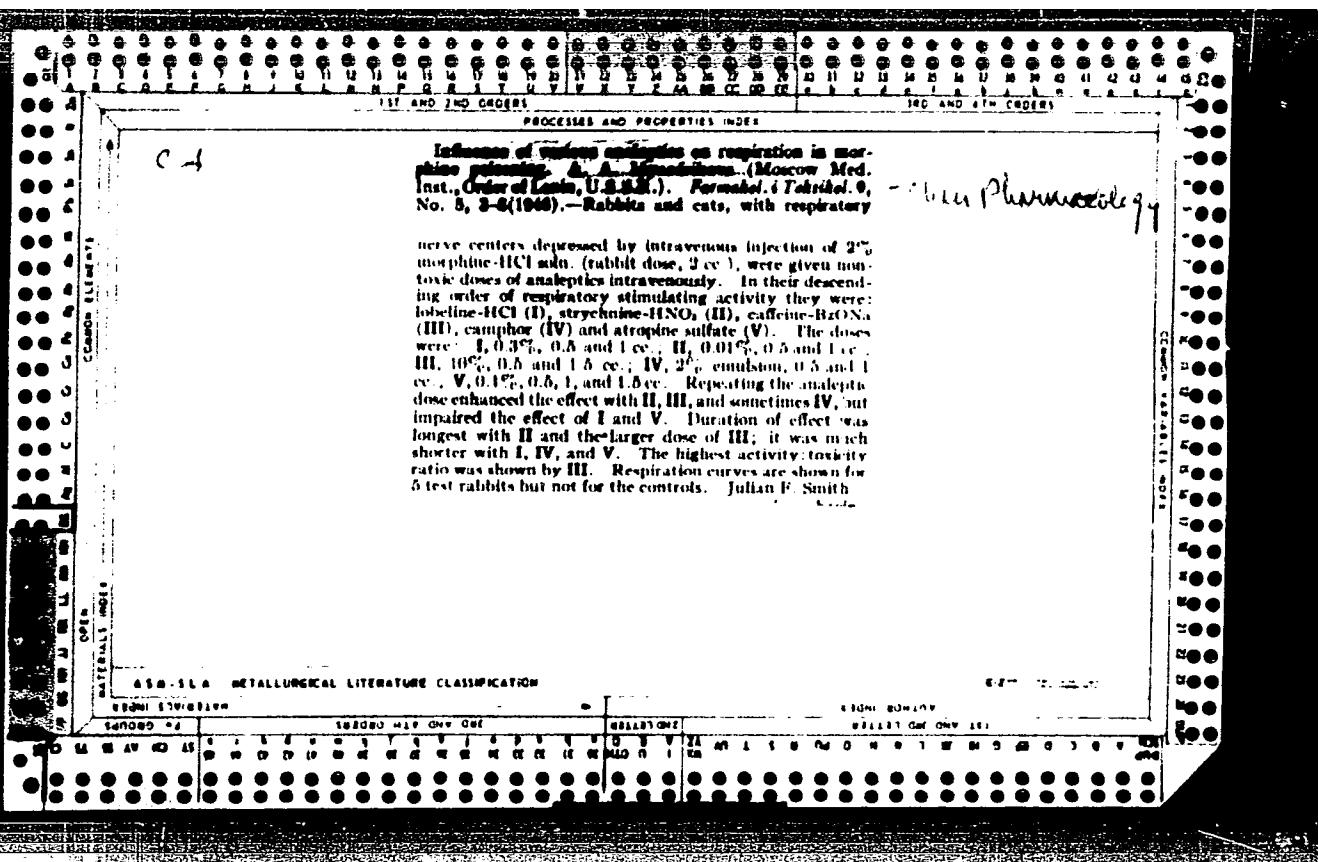
OTHER: 004

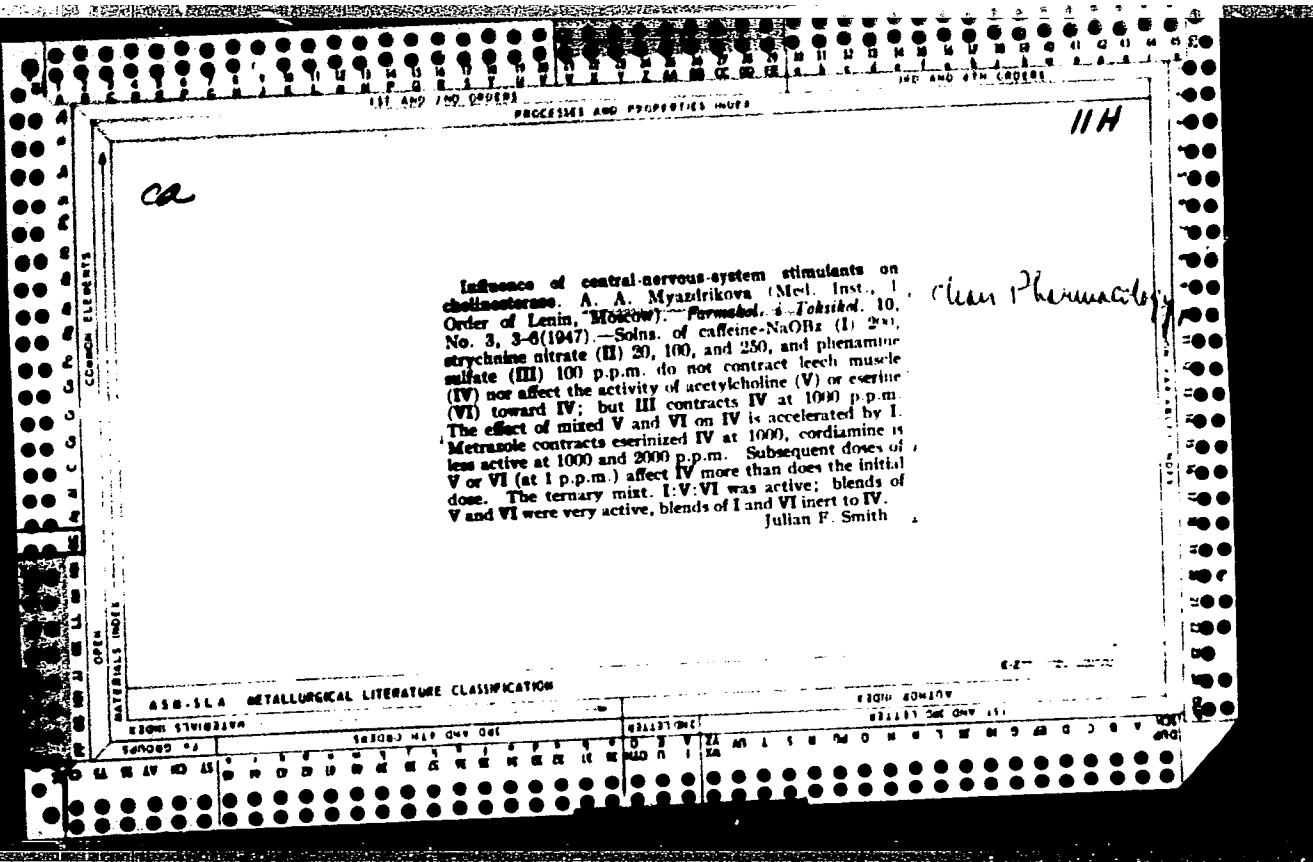
Card 2/2

MYAZDRIKOVA, A. A.

"The Influence of Yohimbine Upon the Specific Action
of Folliculine," Farmokol, i Toksikol., 2, No. 5,
1939., Chair of Pharmacology (Head: Prof. M. P.
Nikolaev), 1st Moscow Medical Inst., -1939-.







MYAZDRIKOVA A A

PAVLOVA, N.Ya.; MYAZDRIKOVA, A.A.; SAMOYLOVA, Z.T.; POLYAKOVA-KONDORSKAYA,
N.B.; MIRZOYAN, S.A.; MENTOVA, V.

Pharmacology and Toxicology Section of the Moscow Society of Physiologists,
Biochemists and Pharmacologists. Farm. i toks. 16 no.1:59-60 Ja-
F '53. (MLRA 6:6)

1. I MOLMI (for Pavlova, Myazdrikova and Polyakova-Kondorskaya). 2. Institut terapii Akademii meditsinskikh nauk SSSR (for Samoylova). 3. Yeravanskiy meditsinskiy institut (for Mirzoyan).

(Pharmacology--Societies) (Physiology--Societies) (Biochemistry--
Societies)

MYAZDRIKOVA, A.A.

In memory of Prof. Mikhail Petrovich Nikolaev, 1893-1949. Apt. delo
3 no.6:54-56 N-D '54. (MLRA 8:2)
(NIKOLAEV, MIKHAIL PETROVICH, 1893-1949)

MYAZDRIKOVA, A.A.

Effect of phenadone on blood pressure in rabbits in experimental cholesterol arteriosclerosis and following implantation of heterogeneous tissue. Farm. i toks. 17 no.2:7-10 Mr-Ap '54. (MLRA 7:6)

1. Kafedra farmakologii (zav. prof. K.S.Shadurskiy) I Moskovskogo ordena Lenina meditsinskogo instituta.

(ADRENAL GLANDS, transplantation,

*eff. of muscle relaxant phenadone on blood pressure in rabbits after implantation)

(TRANSPLANTATION,

*adrenals, eff. of muscle relaxant phenadone on blood pressure in rabbit after implantation)

(ARTERIOSCLEROSIS, experimental,

*eff. of muscle relaxant phenadone on blood pressure in rabbits) (BLOOD PRESSURE,

*in exper. arteriosclerosis & after implantation of adrenals,
eff. of muscle relaxant phenadone)

(MUSCLE RELAXANTS, effects,

*phenadone, on blood pressure in exper. arteriosclerosis & after implantation of adrenals in rabbit)

MYAZDRIKOVA, A. A.

Effects of phenadone on blood pressure in rabbits in experimental myocardiosclerosis. A. A. Myazdrikova. (1st Med. Inst., Moscow). Formul' i Tekhnika, 18, No. 6, 30-2 (1958).—intravenous phenadone at 0.5 mg./kg., in healthy rabbits (not narcotized) lowers blood pressure by 10-15 mm. in 1-2 min. (duration 20-30 min.); at 1 mg./kg. the effect is much more pronounced. The same phenadone dosage, in rabbits with myocardiosclerosis induced by theocin and adrenaline, has a pressor effect (up to 40-mm. rise, duration 1-2 hrs.). Julian F. Smith. MD

USSR / General Division, History, Classics, Personnel

A-2

Abs Jour : Ref Zhur - Biol., No 1, 1958, No 83

Author : Miazdrikova, A.A.

Inst : Not Given

Title : A.M. Preobrazhenskiy

Orig Pub : Farmakol. i toksikologiya, 1957, 20, No 1, 93-94

Abstract : A necrology of the pharmacologist, Aleksandr Mikhaylovich Preobrazhenskiy, who worked on the study of the mechanism of the action of various pharmacological substances on the cardio-vascular system, the pharmacology of the vegetative system, etc. He published a number of textbooks ("Textbook of Prescribing for Veterinarians", "Fundamentals of Medical Prescribing", and others), edited the section "Pharmacology" in "The Reference Journal of Biology". Also noted is the pedagogical and social activity of Preobrazhenskiy.

Card : 1/1

SHADURSKIY, K.S., prof.; IL'YUCHENOK, T.Yu., kand.med.nauk.; ISKAREV,
N.A., kand.med.nauk; KOMISSAROV, I.V., kand.med.nauk; KORAHLEV,
M.V., kand.med.nauk; MYAZDRIKOVA, A.A., kand.med.nauk; NILOVSKAYA,
S.N., kand.med.nauk; REUT, M.A., kand.med.nauk; YAKIMOVICH, L.A.,
kand.med.nauk; GES¹, N.D., red.; BELEN'KAYA, I.Ye., tekhnred.

[Prescription manual] Rukovodstvo po retsepture. Izd.2., ispr.
i dop. Minsk, Izd-vo Belgosuniv. im. V.I.Lenina, 1960. 99 p.
(MIRA 14:1)

(MEDICINE--FORMULAE, RECEIPTS, PRESCRIPTIONS)

MYAZDRIKOVA, A.A.

Effect of vasodilator substances on the course of experimental myocardial infarct in rabbits. Farm. i toks. 23 no.2:136-139 Mr-
Ap '60. (MIRA 14:3)

1. Kafedra farmakologii (zav. - deystvitel'nyy chlen AMN SSSR prof.
V.V.Zakusov) I Mogkovskogo ordena Lenina meditsinskogo instituta
imeni I.M.Sechenova.

(VASOMOTOR DRUGS)

(HEART--INFARCTION)

MYAZDRIKOVA, A.A.

Effect of some vasodilative and ganglionblocking agents on the development of collateral vessels in the heart following myocardial infarction in rabbits with arteriosclerosis. Vest. AMN SSSR 18 no.1:23-27 '63. (MIRA 16:2)

1. Kafedra farmakologii I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.
(ARTERIOSCLEROSIS) (HEART-INFARCTION)
(AUTONOMIC DRUGS)

MYAZDRIKOVA, A.A.

Effect of pharmacological substances on the course of experimental myocardial infarction. Uch.zap. Inst. farm. i khimoter. AMN SSSR 3:292-300'63. (MIRA 16:9)

1. Chair of Pharmacology (Head - Prof. V.V.Zakusov, Member of the U.S.S.R. Academy of Medical Sciences) of the First Moscow Medical Institute.

(HEART---INFARCTION) (AUTONOMIC DRUGS)

MYAZDRIKOVA, t.A.

Effect of ganglieblocking substances on the development of collateral blood vessels in the myocardium in experimental myocardial infarct in rabbits. Farm. i toks. 26 no.2:169-172
Mr-Ap '63. (MIRA 17:3)

1. Kafedra farmakologii (zav. - devstvitel'nyy blen AMN S.S.R.
prof. V.V. Zkusov) 1-go Moskovskogo ordena Lenina meditsinskogo
instituta imeni Sechenova.

GORDEYEVA, M.N.; MYAZDRIKOVA, M.N.

Separation of zirconium from uranium in sulfuric acid solutions
on the anion exchanger EDE-10P. Uch. zap. LGU no.297:16-19 '60.
(MIRA 13:11)

(Zirconium) (Uranium)

YAZDAN OV , I. Cand Tech Sci

Dissertation: "On the Problem of Improvement
in Storage of Carrots and Cabbage."

22/6/50

Moscow Inst of Soviet Cooperative Trade.

SO Vecheryaya Moskva
Sum 71

MYAZEL', I.Ye.

Therapy of peptic ulcer in children. Pediatrilia, Moskva no.5:31-35
Sept-Oct 1953.
(CLML 25:5)

1. Professor.

MYAZHEVICH, Ul. [Miazhevich, Ul.] (g. Bobruysk)

Her line of life. Bab. i sial. 35 no.6:6-7 Je '59.
(MIREA 12:8)
(Bobruysk--Women in public life)

IVANOVSKIY, Oleg Sergeyevich; MYAZIN, Nikolay Nikolayevich;
ANTONOVA, N.N., inzh., red.

[Preparation of gas sand-lime panels and their erection in
apartment houses of series 1-467-4; practices of the Reinforced
Concrete Products Plant No.1 of the "Stroitel'" Trust and the
No.42 Construction and Assembling Administration (Voronezh)]
Izgotovlenie gazosilikatnykh panelei i montazh iz nikh domov
serii 1-467-4; opyt zavoda zhelezobetonnykh izdelii no.1 tresta
"Stroitel'" i Stroitel'no-montazhnogo upravleniya No.42
(g.Voronezh). Moskva, Gostroizdat, 1963. 30 p.
(MIRA 17.9)

1. Moscow. Nauchno-issledovatel'skiy institut organizatsii,
mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stva.
2. Nachal'nik tekhnicheskogo otdela Voronezhskogo zavoda zhe-
lezobetonnykh izdeliy No.1 tresta "Stroydetal'" (for Ivanovskiy).
3. Nachal'nik gazosilikatnogo tsekha Voronezhskogo zavoda zhe-
lezobetonnykh izdeliy No.1 tresta "Stroydetal'" (for Myazin).

MYAZOV, Yu.I.

Construction of the main building of the first section of the
Yaroslavl thermal electric plant No.3 in precast reinforced concrete.
Prom.stroi. 40 no.4:15-18 '62. (MIRA 15:5)

1. Yaroslavskiy TETsstroy.
(Yaroslavl—Electric power plants) (Precast concrete construction)

MYCA, Zenon

Malignant synovioma. Pol. przegl. chir. 34 no.10:1023-1025 '62.

l. Z I Oddzialu Chirurgicznego Szpitala Miejskiego w Rydułtowach
Ordynator: dr J. Bulanda.

(SYNOVIOMA) (THIGH)

MYCA, Zenon

Symmetric dissecting osteochondritis. Pol. przegl. chir. 34 no.10:
1027-1029 '62.

1. Z I Oddzialu Chirurgicznego Szpitala Miejskiego w Rydułtowach.
Ordynator: dr J. Bulanda.
(OSTEOCHONDRITIS)

MYCA, Zenon

Traumatic avulsion of the gallbladder from the liver. Pol. przegl.
chir. 34 no.11:1201-1203 '62.

l. Z I Oddzialu Chirurgicznego Szpitala Miejskiego w Rydułtowach.
Ordynator: dr J. Bulanda.
(GALLBLADDER DISEASES) (ABDOMINAL INJURIES)

MYCA, Zenon

Effect of chronic morphine administrations on the behavior of acid desoxyribonuclease in pancreatic secretory cells in the rat.. Pat. Pol. 15 no.2z 1-3-168 Ap-Je '64

I. Z I Kliniki Chirurgicznej Slaskiej Akademii Medycznej w Zabrzu (Kierownika prof. dr.med. S. Szyszko) i ze Szpitala Miejskiego w Rydułtowach k. Rybnika (Dyrektora dr. med. J. Bielanda).

MYCA, Zenon

Injury to the internal organs of the abdominal cavity due to
traffic accidents. Pol. Ryg. 1ek. 19 no. 4381649-1751 24.0.1954

I. O I oddziału Chirurgicznego Szpitala Miejskiego w Bydgoszczy
(ordynator dr. J. Bulanda).

MYCA, Zenon

Morphological changes in the exocrine part of the pancreas
following prolonged administration of morphine in rats.
Pol. przegl. chir. 36 no.8:991-997 Ag '64.

1. Z I Kliniki Chirurgicznej Sl. Akademii Medycznej w Zabrzu
(Kierownik: prof. dr S. Szyszko) i z I Oddzialu Chirurgicznego
Szpitala Miejskiego w Rydułtowach (Ordynator: dr. J. Bulanda).

MYCA, Zenon; SZOJDA-MYCOWA, Rita

The diagnostic value of rectoromanoscopy in ulcerative colitis.
Wiad. lek. 18 no.7:569-573 1 Ap '65

1. Z I Oddzialu Chirurgicznego Szpitala Miejskiego w Rydułtowach
(Ordynator: lek. med. J. Bulanda) i z Oddzialu Chorob Wewnętrznych
Szpitala Miejskiego w Rydułtowach (Ordynator: lek. med. R. Martynka).

MVCA, Renon

Surgical therapy of cryptorchism using Lattimer's method.
Vol. przegl. chir. 37 no.9:885-888 S '65.

I. Z I Oddzialu Chirurgicznego Szpitala Miejskiego w
Bydgoszczach (Ordynator: dr. J. Bulanda).

MYČAK, VĽADIMÍR

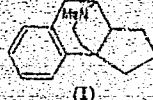
Pestovanie liecivych, aromatickych a koreninovych rastlin. Bratislav,
Stutne phlohosporarske nakl., 1953. 240 p. (Rastlinna výroba, sv. 3)
(The culture of medical, aromatic, and spice plants)

DA Not in DIC

DD: Monthly List of East European Accessions (EAL) LC, Vol. 6, No. 12, Dec 1957. Incl.

MYCHAJLYSZYN; VLADIMIR

Synthetic analgetics. I. Attempted syntheses of *N*-methyl-*δ*-morphinan. Miroslav Protić, Vladimir Mychałyszyn and Jiri Jílek (Výzkumný ústav farmaceutického průmyslu, Plzeň). *Chem. Listy* 19, 1041-52 (1965). Procedures described by Grew and Mondon (*C.A.* 43, 4274a) and by Schneider and Hellerbach (*C.A.* 45, 20102) were applied to a cyclopentane analog of *N*-methylmorphinan called throughout the paper *N*-methyl-*β*-normorphinan (I).



(I)

I would have resulted from cyclization of 1-methyl-2-benzyl-3,4-cyclopentene-1,4,5,6-tetrahydropyridine (II) with H_3PO_4 , but prep. of II from $PhCH_2MgCl$ and 3,4-cyclopentenopyridine methiodide (III) was unsuccessful. An alternate method was based on the following series of reactions: cyclopentanone and $CH_3(CN)CO_2H$ gave 1-cyclopenten-1-yl-acetonitrile (IV), the reduction of which yielded 2-(1-cyclopenten-1-yl)ethylamine (V). This compd. treated with $PhCH_2COCl$ gave *N*-phenylacetyl-2-(1-cyclopenten-1-yl)ethylamine (VI) which was transformed with P_2O_5 to 2-benzyl-3,4-cyclopenteno-5,6-dihydropyridine (VII). Hydrogenation of the methiodide of VII yielded II but the attempt to cyclize II to I was unsuccessful. 2-Carbethoxycyclopentanone (VIII) (90 g.), 72 g. $NCCH_2CO_2Et$, and 15 ml. CH_3N gave 82 g. Et ester of 2-carboxy-1-cyclopenten-1-yl-*γ*-nito-

acetic acid (IX), $b.p.$ 143-8°. Substituting 60 g. $NCCH_2CO_2Et$ for the $NCCH_2CO_2Et$, heating the mixt. 4 hrs. at 100°, dig. with 400 ml. Et_2O , washing 3 times with 100 ml. HCl (1:4), and distg. the ext. gave 57% of the Me ester of IX, $b.p.$ 125-32°. Refluxing Et (or Me) ester of IX 10 hrs. with excess HCl yielded 40% (or 39%) 2-carboxy-1,3-dihydro-1,2-dihydro-3,4-cyclopentenopyridine (X), $b.p.$ 178-81° (from H_2O), and 30% (or 23%) 2,6-dihydroxy-3,4-cyclopentenopyridine (XI), $b.p.$ 263-4° (from 50% AcOH). Esterification of X with m. 263-4° (from 50% AcOH). Esterification of X with $EtOH$ and $PhMe$ gave 61% mono-Et ester of X, m. 98-7° (from H_2O). XI (24 g.) and PCl_5 (100 ml.) gave 20.5 g. 2,6-dichloro-3,4-cyclopentenopyridine (XII), m. 34-5°, $b.p.$ 102-5° (Prelig and Metzler, *C.A.* 41, 455). Hydrogenation 29 g. XII in a soln. of 8 g. Na in 150 ml. $EtOH$ over 35% Raney Ni-8 hrs. at 10°-20° and 100 atm. gave 12.5 g. 3,4-cyclopentenopyridine (XIII), $b.p.$ 72°, n_D^{20} 1.485, $m.p.$ 65-7° (from Me_2CO-Et_2O). Refluxing a mixt. of 72 g. $NCCH_2CO_2H$, 50 g. cyclopentanone, 30 ml. CaH_2 , and 2 g. NH_4OAc 7 hrs. at 150-60° with continual removal of H_2O gave after cooling 80 g. cyclopentenylidenecyanocrylic acid, m. 125-8° (from H_2O). Distr. of this product *in vacuo* gave 75% IV, $b.p.$ 81°, $b.p.$ 85-8°, n_D^{20} 1.489, also obtained in 55% yield by refluxing 90 g. cyclopentanone, 90 g. $NCCH_2CO_2H$, 50 ml. CaH_2 , and 4 g. NH_4OAc at 150-65° 4 hrs. with continuous water removal, and by distg. the crude mixt. *in vacuo* at 20 mm. Adding during 2 hrs. 21.4 g. IV to a stirred mixt. of 10 g. LiAlH₄ in 400 ml. Et_2O cooled with ice and salt, keeping the mixt. 60 min. in the cooling bath, decompg. the mixt. with 40% NaOH, and extg. the aq. layer with Et_2O gave 7 g. V, $b.p.$ 60-3°; HCl salt, m. 165° (decompn.) (from Me_2CO); picrate, m. 146-6° (from

Miroslav Protiva

(2/2)

B(OH)₂. Adding 10 g. IV in 20 g. BuOEt and 200 ml. PhMe to a suspension of 9.2 g. Na dust in 120 ml. boiling PhMe, refluxing and stirring the mixt. 2.5 hrs., decomp., with 50 ml. H₂O, seprg. the aq. layer, extg. the PhMe layer with a mixt. of 15 ml. HCl and 45 ml. H₂O, alkallizing the acidic ext. with 20% KOH, and extg. the base with ether gave 4 g. 2-cyclopentylethylamine, bp 55-10°; HCl salt, m. 197° (from EtOIL-Me₂CO). Treating a mixt. of 18 g. PhCH₂-COCl, 7 g. V, and 3.5 g. of the HCl salt of V in 50 ml. H₂O with 60 ml. 20% NaOH with stirring, filtering off the solid, and boiling it with 100 ml. H₂O gave 19 g. VI, m. 92° (from C₆H₆-petr. ether). Refluxing 11 g. VI, 80 ml. C₆H₆, and 30 g. P₂O₅ 1 hr., decomp., the mixt. with ice, alkallizing the soln., extg. with Et₂O, and evapng. the ext. gave 8 g. crude VII; picrate, m. 114-16° (from Me₂CO-EtOH). When the crude product was distd., b.p. 120-2°, the picrate of the same compn., m. 109° (from EtOH); methiodide (from the undistd.-VII), m. 181° (from MeOH-EtOH). Hydrogenation of the methiodide of VII (8.5 g.) in 100 ml. MeOH over 20 g. Raney-Ni in the presence of 3 g. KOH at 110° and room temp. gave 3 g. II, b.p. 117-22°; picrolonate, m. 182-4° (from aq. B(OH)₂). In another expt., or

by hydrogenation of the MeI salt of VII over Pt, a quaternary salt C₂₁H₂₁N₁U, m. 191° (from MeOH-EtOH) was obtained. Hydrogenation of undissolved, free base VII (2.5 g.) in 20 ml. MeOH over 1 g. Raney-Ni at room temp. and atm. pressure 25 min.; alkallization and ether extn. of the mixt. gave 2.4 g. 2-benzyl-1,1-cyclopenteno-1,2,5,6-tetrahydropyridine; picrate, m. 115° (from B(OH)₂); picrolonate, m. 138-9° (from B(OH)₂). Heating 0.5 g. II 72 hrs. at 120-160° with 16 ml. concd. H₂SO₄ gave 0.3 g. recovered II but no expected I.

M. Hudlický

NYC 11/11/52 YANU

Synthetic spasmolytics. XII. Derivatives of $\alpha\alpha$ -diphenyl- γ -methyl-methacryloyronitrile. I V. Mychalyszyn and J. J. Lick. XIII. Butyl cyclohexyldiphenylcarbinols. V. Mychalyszyn, J. J. Lick and M. Protiva. XIV. Two new parasympatholytic and spasmolytically highly active quinphenium salts. M. Protiva and F. Adlerová (*Coll. Trav. chim. Tchécosl.*, 1957, 39, 793-798, 799-805).

(168-169) --XII. Sulphonium salts of the type $(C_6H_{11})_2C(R)-(CH_2CH_2S)^2(CH_3)_2^+$ were prepared and tested for pharmacological activity. It was found that spasmolytic action was exhibited where R equals CN, COOH, CONH, and COEt. A table shows the results of comparison tests using Propivan as standard. The relatively low solubility of salts in water made an exhaustive test impossible. Experimental details of prep. are given. (11 references.)

XIII. The authors describe the prep. and properties 2-, 3- and 4-dimethylamino deriv. of cyclohexyldiphenylcarbinols, the starting point being esters of the isomeric dimethylaminobenzoic acids. It was found that the hydrochlorides of 2- and 3-dimethylamino deriv. (m.p. 253 and 243° respectively) were 20-40 times less anti-acetylcholine active than Propivan and more than 100 times less antihistamine-active than Benadryl. Although all three isomers have two asymmetric centres in their molecules, so that two series of racemates could be expected, their existence was not established; hence the carbinols would appear to be homogeneous, the more so as the bases, hydrochlorides and picrates gave characteristic crystals. (14 references.)

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453d
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PB

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V. MICHAIJYSZYK, J. O. TILZKE

XIV. The two new substances $\text{Ph-C(R)OEt-CO}_2\text{-}(CH_2)_3\text{-SMe}_2$,¹⁷ where R is C_6H_5 or $\text{n-C}_4\text{H}_9$, were obtained in the usual way, i.e., by addition of MeI to the corresponding 2-methylmercaptoethyl ester. They were found to be highly active, as effective as Thiospasmin and atropine, and considerably less toxic than the former; as was anticipated, introduction of hydroxyl groups into the acetyl residue of compounds of the Thiospasmin type resulted in increased parasympathological action. (In German.) W. H. KEMT.

10
4E3a
4E4J

WYWIAD Z YN, VLADIMÍR

Synthetic antispasmodics. XIII. Basic cyclohexylidiphenylcarbinols. Vladimír Mychalyszyn, Jiff O. Jilek, and Miroslav Protilva (Pharma-Biochem. Research Inst., Prague). *Chem. Listy* 50, 1982-7(1982); cf. *C.A.* 51, 2000. — Prepn. is described of cyclic analogs of the 1,1-diphenyl-3-aminopropanols, antispasmodics, yielding products with low biol. activity. Hydrogenation of Me *N,N*-dimethylanthranilate (9.0 g.) with PtO₂ in AcOH gave 2.0 g. oily *Me* 2-dimethylaminocyclohexanecarboxylate (I), b.p. 130-2° (*picrate*, m. 141°), and 2.0 g. mixt. of *Me* benzoate and hexahydrobenzoate, whereas hydrogenation with Raney Ni at 160° and 140 atm. yielded 60% *N,N*-dimethylcyclohexylamine, m. 174°. *Me* 4-dimethylaminobenzoate (9.0 g.) gave, on hydrogenation with PtO₂ in AcOH, 5.4 g. *Me* 4-dimethylaminocyclohexanecarboxylate (II), b.p. 120-3° (*picrate*, m. 138° from EtOH), and *Et* 4-dimethylaminobenzoate (10.3 g.) yielded 7.7 g. *Et* 4-dimethylaminocyclohexanecarboxylate (III), b.p. 124-8° (*picrate*, m. 119° from EtOH). Hydrogenation had a sterically uniform course with only 1 series of racemates formed. Treatment of I, II, and III with PhMgBr followed by decomprn. with NH₄Cl soln. gave 33% 2-dimethylaminocyclohexylidiphenylcarbinol (IV), m. 175° (from EtOH-C₆H₆) (*picrate*, m. 200°; *HCl salt*, m. 253°); 27% 3-dimethylaminocyclohexylidiphenylcarbinol (V), m. 135° (from C₆H₆) (*picrate*, m. 190° from EtOH-*HCl salt*, m. 243° from EtOH-Et₂O); and 12% 4-dimethylaminocyclohexylidiphenylcarbinol, m. 149° (from C₆H₆) (*HCl salt*, m. 229°), with 3-dimethylaminocyclohexyl phenyl ketone (*picrate*, m. 170°) and 4-dimethylaminocyclohexyl

3

Chem

1/2

Myczalszyn, V., Jilek, J.O., Protiva, M.

phenyl ketone (picrate, m. 180°) as by-products. V was dehydrated by boiling 2 hrs. with 1:1 H₂SO₄ to 1-dimethylamino-3-benzhydrylidenehexane, insol. in Et₂O and C₆H₆; picrate, m. 190° (from EtOH); HCl salt, m. 227° (from EtOH-Et₂O). IV and V had very low antiacetylcholine and antihistaminic activity and LD₅₀ = 62 mg./kg. and 91 mg./kg., resp.

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Mychajlyszyn, Vladimir

Synthetic analgetics. II. Synthesis and reactions of some partially hydrogenated derivatives of 1-phenylisoquinoline. Vladimir Mychajlyszyn and Jiri O. Illek (Pharm.-Biochem. Research Inst., Prague). *Chem. Listy* 50, 2011-17 (1956); cf. *C.A.* 50, 3476a. Methiodide (prepd. from 19.0 g. 5,6,7,8-tetrahydroisoquinoline) with PhMgBr followed by decompn. of the product with ice and NH₄Cl soln. yielded 0.0 g. unstable base, b.p. 140-3°, apparently 1-phenyl-2-

methyl-1,2,5,6,7,8-hexahydroisoquinoline, which was hydrogenated with PtO₂ in MeOH to give 85% 1-phenyl-2-methyl-1,2,3,4,5,6,7,8-octahydroisoquinoline (I), b.p. 125-30°; picrate, m. 210-20° (decompn., from EtOH). *N*-(8-Cyclohex-1-enyl)benzamide (II), obtained in 9.0 g. yield by dropping 7.0 g. PhCOCl into 50 ml. 20% NaOH and 5.0 g. cyclohex-1-enylethylamine under vigorous stirring and ice-cooling, and crystd. from aq. MeOH, m. 78°. It was cyclized by refluxing with P₂O₅ in C₆H₆ to give, on alkalization, extn. with Et₂O, and chromatography on Al₂O₃, approx. equal amts. of red picrate of 1-phenyl-3,4,5,6,7,8-hexahydroisoquinoline (III), m. 122-3°, and yellow picrate of the base C₁₁H₁₁ON (IV), m. 153-4° (from EtOH), and 2 other bases, C₁₁H₁₁ON, characterized as picrates, m. 131° and 192°, resp. Cyclization of II by boiling with POCl₃ yielded 6:1 III and IV. Crude III (0.0 g.) contg. a small amt. of IV was hydrogenated with Raney Ni in MeOH to give, on distn., 3.5 g. 1-phenyl-1,2,3,4,5,6,7,8-octahydroisoquinoline hydrochloride (V), m. 128-33°; picrate, m. 130-2° (from H₂O). 1-Phenyl-2-methyl-3,4,5,6,7,8-hexahydroisoquinoline iodide (VI), obtained in 4.0 g. yield by heating 10.0 g. crude III 72 hrs. with 20 ml. MeI, was dissolved in MeOH-KOH and shaken with 0.0 g. Raney Ni 2 hrs. in an H₂ atm., and distd., to give I in 75% yield. I failed to cyclize on heating with H₂PtCl₆.

L. J. Urbancik

MYCHAJLYSZYN, V.

CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref. Zhur-Khimiya, No 19, 1958, 64383.

Author : Protivam, Mychajlyszyn, Novakl, Borovickam,
Adlerovae, Hachv.

Inst :
Title : Synthetic Spasmolytic Agents. XVII. Certain New
Esters and Amides Containing a Sulfonium Group.

Orig Pub: Ceskosl. farmac., 1957, 6, No 8, 425-431.

Abstract: To test for spasmolytic activity, sulfonium salts
were extracted from the sulfides $\text{CH}_3\text{SCH}_2\text{COR}$ (I),
 $\text{CH}_3\text{SCH}_2\text{CH}_2\text{COR}$ (II), $\text{CH}_3\text{CH}(\text{SCH}_2)\text{COR}$ (III), where
(a) R is OC_2H_5 , (b) OH, (c) Cl, (d) $\text{OCH}(\text{C}_2\text{H}_5)$.
During in vivo tests, the iodo-methylates of (IIId),
(II) R = $(\text{C}_2\text{H}_5)_2\text{N}$, (IIe), (II), R= $\text{C}_2\text{H}_5\text{CH}_2\text{NC}_2\text{H}_5$, (IIIf),

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CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref. Zhur-Khimiya, No 19, 1958, 64383.

tracted with ether 72% Ib, boiling point 108-112°/8mm. Obtained in the same way are 80% IIIb, boiling point 105-108°/8 mm, 70% IIb, boiling point 120-124/8mm. To 10.6 g of Ib 20 ml of SCl_2 is added, boiled one hour, Iv is distilled, 80%, boiling point 57-60°/15 mm. Obtained analogously are 65% III, boiling point 95-100°/100 mm, 58% IIv, boiling point 77-82°/8 mm. To 8 g $(\text{C}_6\text{H}_5)_2\text{CHOH}$ in 35 ml of C_6H_6 and 30 ml of pyridine, 7 g Ic in 35 ml of C_6H_6 is added at 0° for 15 minutes, from the solution are yielded 7 g Id, boiling point 153-155°/0.4 mm. IIId, boiling point 147-149°/0.2 mm; IIId, boiling point 169-172°/0.7 mm, melting point 38°, iodo-methylate, melting point 107°. From 27.2 g $\text{C}_6\text{H}_5\text{CH}_2\text{COOH}$ and iso- $\text{C}_3\text{H}_7\text{MgCl}$ by a well-known method (RZhKhim, 1957 26740) is obtained 19 g of 1-oxicyclohexylphenylacetic acid

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CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref. Zhur-Khimiya, No 19, 1958, 64383.

15 hours, concentrated in a vacuum, water is added and C₆H₅I extracted. 52% I, R = C₆H₅NH, melting point 79°, during processing of CH₃I yields an adduct of iodo-methlate I, R = C₆H₅NH and (CH₃)₂Si, melting point 130-131°. 4 g of 3-chlorophenothiazine is boiled with 3.1 g of ClCH₂CH₂COCl in 50 ml of C₆H₆ 4 hours, concentrated in a vacuum, 5.5 g of N-(β-chloropropionyl)-3-chlorophenothiazine is obtained, melting point 112-113°. The mixture 3.15 g of C₆H₅N(C₂H₅)COCH₂CH₂Cl, 1.5 g of V and 50 ml of acetone is boiled 10 hours, diluted with water and extracted with ether of II, R = C₆H₅NC₂H₅(IIh). From unrefined IIh and CH₃I in acetone iodo-methylate of IIh is obtained, melting point 98°. From 13 g (C₆H₅)₂NCOCH₂CH₂Cl and 4.2

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MYCHAJLYSZYN, V.; JILEK, J.

"Synthetic antispasmodics. XII Derivatives of ., .-diphenyl-. -methylmercaptobutyronitrile. In German."

p. 793 (Collection of Czechoslovak Chemical Communications, Sbornik Chekoslovatskikh Khimicheskikh Rabot) Vol. 22, no. 3, June 1957
Prague, Czechoslovakia

SC: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

MYCHAJLYSZYN, V.; JILEK, J.; PROTIVA, M.

"Synthetic antispasmodics. XIII. Basic cyclohexyldiphenyl carbinols. In German."

p. p. 799 (Collection of Czechoslovak Chemical Communications, Stornik Chechoslovatskikh Khimicheskikh Rabot) Vol. 22, no. 3, June 1957
Prague, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

Mycha,jlyszyn, Vladimir

CZECHSLOVAKIA/Organic Chemistry, Natural Substances and Their Synthetic Analogues.

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 74167

Author: Miroslav Protiva, Jiro O. JILEK, Vladimir HACH, Edita ADLEROVA, Vladimira Mycha,jlyszyn.

Inst. : American Chemical Society

Title : Synthetic Models of Blood Pressure Depresssing Alkaloids.
II. Simple Models of Reserpine with Cyclohexane Ring.

Orif. Pub: Chem. listy, 1957, 51, No 11, 2109-2117.

(For Abstract see co-authors)

CZECHOSLOVAKIA/Organic Chemistry Synthetic Organic Chemistry. G-2

Abs Jour: Ref Zhur-Khim., No 24, 1958, 81677

Author : Mychajlyszyn V. Jilek J

Inst :

Title : The Synthetic Anesthetic Compounds. II The Preparation
and Reactions of Some Hydrogenated Derivatives of 1-
Phenylisoquinoline.

Orig Pub: Collect czechosl chem commun., 1958, 23, No 5 932-939

Abstract: See R Zh. Khim., 1958. 11331.

Card : 1/1

35

MYCHAJLYSZYN, V.; PROTIVA, M.

Antihistamine substances. XLVI. Derivatives of 2,3,6,7,-dibenzo-suberane. Coll Cz chem 25 no.12:3944-3965 '59. (EEAI 9:6)

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.
(Antihistamines)

ACC NR: AP7004557

SOURCE CODE: UR/0020/66/168/002/0304/0307

AUTHOR: Mychelkin, E. G.; Dzhakusheva, K. G.

ORG: Siberian Physicotechnical Institute im. V. D. Kuznetsov (Sibirskiy fiziko-tehnicheskiy institut); Astrophysical Institute, AN KazSSR (Astrofizicheskiy institut AN KazSSR)

TITLE: Elliptical polarization of emission of crab nebula

SOURCE: AN SSSR. Doklady, v. 168, no. 2, 1966, 304-307

TOPIC TAGS: nebula, astronomy

ABSTRACT: Photographic observations of the nebula M1 in the band 5300-6300 Å were made in October-December 1964 using an automatic polarigraph adapted to the 50-cm meniscus telescope of the Astrophysical Institute, Academy of Sciences Kazakh SSR. A phase plate close in properties to a quarter-wave plate ($\lambda/4 = 5340 \pm 40$ Å) and the nonmonochromatic character of the radiation was taken into account. Data were obtained on the elliptical radiation of Crab nebula. Its ellipticity is beyond question. Figure 1 is a resulting diagram of the elliptical polarization of Crab nebula. It was found for the nebula that the degree of elliptical polarization P exceeds the value of the "degree of polarization" P_1 obtained on the assumption that the emission is partially (plane) polarized by an average of $5 \pm 3\%$. The analysis reveals that ultrarelativistic electrons in the nebula M1 move for the most part in directions opposite the magnetic field. This paper was presented by Academician V. G. Fesenkov on 23 August 1965. The authors thank D. A. Rozhkovskiy, V. N. Kessenikh, A. V. Kurchakov, and A. B. Gil'varg for assistance in carrying out this work. Orig. art. has: 1 figure and 11 formulas. [JPRS: 37,397]

SUB CODE: 03 / SUBM DATE: 02Jul65 / ORIG REF: 005 / OTH REF: 003

Card 1/1

UDC: 523.852

0926 1388

1/28/15

Mychkis, A. Sur les domaines d'unicité pour les solutions des systèmes d'équations linéaires aux dérivées partielles. Rec. Math. [Mat. Sbornik] N.S. 19(61), 499-522 (1946). (Russian, French summary)

Let there be given a system of linear partial differential equations,

$$(1) \quad \frac{\partial u_r}{\partial x} = \sum_{n=1}^m f_{rn}(x, y) \frac{\partial u_n}{\partial y} + \sum_{n=1}^m g_{rn}(x, y) u_n, \quad r = 1, \dots, n,$$

the coefficients f_{rn} , g_{rn} being defined in a domain G . At every point $(x, y) \in G$ a multivalued function (2), $y' = \lambda(x, y)$, is defined by the characteristic equation

$$\det \|f_{rn} - \lambda \delta_{rn}\| = 0.$$

It is assumed that λ takes on only real values. The author considers (2) as a differential equation "in contingents." A curve $y = \varphi(x)$ is a characteristic of (1) (solution of (2)) if φ is continuous and its four derivatives satisfy

$$\min \lambda[x, \varphi(x)] \leq D\varphi \leq \max \lambda[x, \varphi(x)].$$

The theory of such differential equations [Zaremba, C. R. Acad. Sci. Paris 199, 545-548 (1934); Bull. Sci. Math. (2) 60, 139-160 (1936); Marchaud, C. R. Acad. Sci. Paris 199,

1278-1280 (1934); Compositio Math. 3, 89-127 (1936)] is the main tool of the present paper.

Holmgren [see note 1 in Hadamard, *Leçons sur la Propagation des Ondes et les Équations de l'Hydrodynamique*, Paris, 1903] proved that, if $\{u_n\}$ is a solution of (1) and $u_n = 0$ ($n = 1, \dots, n$) on a curve l : $x = x(t)$, $y = y(t)$ violating (2) at all points, all u_n vanish identically in a neighborhood of l . His theorem assumes analyticity of all functions considered, a restriction which was removed by Carleman [Ark. Mat. Astr. Fys. 26B, no. 17 (1939)]. The author wants to obtain uniqueness theorems in the large from the results of Holmgren and Carleman. He considers the case where l is a vertical segment and calls a domain $G_1 \subset G$ a T -domain (with respect to l) if every characteristic extending from a boundary point of G_1 to another boundary point meets l ; G_1 is called an E -domain if the uniqueness of the solution of the Cauchy problem for (1) in G_1 (with Cauchy data on l) can be inferred from the local uniqueness theorems of Holmgren and Carleman without further reference to the differential equations. The main theorem states that every T -domain is an E -domain. The converse is true under certain additional conditions (too complicated to be stated here). Examples show that these conditions are essential.

L. Bers (Syracuse, N. Y.).

Journal of Mathematical Reviews

Vol. 1

No. 1

Snow

LYSENKO, A.Ya.; MYCHKO-MEGRIN, A.Yu.; BARKOV, V.N.; KASATSKIY, A.I.;
FEDOROVA, S.P.; YERMAKOV, V.V.

Medicogeographical studies of Brazil. Vop geog. no.68:137-203
'65. (MIRA 18:12)

ACC NR: AT6031457

SOURCE CODE: UR/0000/65/000/000/0090/0106

AUTHOR: Mychko-Megrin, A. Yu.

ORG: Institute of Medical Parasitology and Tropical Medicine im. Ye. I. Martsinovskiy
(Institut meditsinskoy parazitologii i tropicheskoy meditsiny)

TITLE: Methods of evaluating the number of persons infected with parasitic diseases

SOURCE: Konferentsiya po metodam mediko-geograficheskikh issledovaniy. Moscow, 1965. Metody mediko-geograficheskikh issledovaniy (Methods of medicogeographical research); materialy konferentsii. Moscow, 1965, 90-106.

TOPIC TAGS: medical geography, parasite survey, epidemiology, parasitology, disease incidence, animal parasite, infective disease

ABSTRACT: The advantages and disadvantages of using local disease and death statistics, data from specialists, random sampling, foreign data, data from single outbreaks, and longitudinal-survey data in estimating the degree of parasite infestation over large areas were presented. Factors affecting the accuracy of epidemiological and medical geographical mapping and evaluation were presented in more detail, and involved primarily limitations in the accuracy of the given survey method. Such limitations were nonuniformity in the population surveyed, variations in emphasis of the many

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ACC NR: AT6031457

surveys incorporated into the report, the difference in susceptibility of various age groups to some diseases, variations in seasonality of both surveys and diseases, and the fact that some data were comparatively recent while other data were quite old. To improve accuracy in parasitology surveys, more coherent standardized plans for taking, recording, and evaluating data were recommended.

[WA-50; CBE No. 12]

SUB CODE: 06/ SUBM DATE: 17Sep65/ ORIG REF: 015/ OTH REF: 031/

Card 2/2

ABDULKABIROVA, M.A.; ALEKSANDROVA, M.I.; AFONICHEV, N.A.; BANDALETOV, S.M.; BISPALOV, V.F.; BOGDANOV, A.A.; BOLOVIKOV, L.I.; BORSUK, B.I.; BORUKAYEV, R.A.; BUVALKIN, A.K.; BYKOVA, M.S.; DVORTSOVA, K.I.; DEMBO, T.M.; ZHUKOV, M.A.; ZVONTSOV, V.S.; IVSHIN, N.K.; KOPYATKEVICH, R.A.; KOSTENKO, N.N.; KUMPAN, A.S.; KULYUKOV, K.V.; LAVROV, V.V.; LYAPICHEV, G.F.; MAZURKEVICH, M.V.; MIKHAYLOV, A.Ye.; MIKHAYLOV, N.P.; MYCHNIK, M.B.; NIDLENKO, Ye.N.; NIKITIN, I.F.; NIKIMOROVA, K.V.; NIKOLAYEV, N.I.; PUPYSHEV, N.A.; RASKATOV, G.I.; RENGARTEN, P.A.; SAVICHEVA, A.Ye.; SALIN, B.A.; SEVRYUGIN, N.A.; SEMENOV, A.I.; CHERNYAKHOVSKIY, A.G.; CHUYKOVA, V.G.; SHLYGIN, Ye.D.; SHUL'GA, V.M.; EL'GER, E.S.; YAGOVKIN, V.I.; NALIVKIN, D.V., akademik, red.; PERMINOV, S.V., red.; MAKUSHIN, V.A., tekhn.red.

[Geological structure of central and southern Kazakhstan]
Geologicheskoe stroenie TSentral'nogo i IUzhnogo Kazakhstana.
Leningrad, Otdel nauchno-tekn.informatsii, 1961. 496 p.
(Leningrad. Vsesoiuznyi geologicheskii institut. Materialy, no.41)
(MIKA 14:7)

* (Kazakhstan--Geology)

ACC NR: AT6031457

SOURCE CODE: UR/0000/65/000/000/0090/0106

AUTHOR: Mychko-Megrin, A. Yu.ORG: Institute of Medical Parasitology and Tropical Medicine im. Ye. I. Martsinovskiy
(Institut meditsinskoy parazitologii i tropicheskoy meditsiny)TITLE: Methods of evaluating the number of persons infected with parasitic diseases

SOURCE: Konferentsiya po metodam mediko-geograficheskikh issledovaniy. Moscow, 1965. Metody mediko-geograficheskikh issledovaniy (Methods of medicogeographical research); materialy konferentsii. Moscow, 1965, 90-106.

TOPIC TAGS: medical geography, parasite survey, epidemiology, parasitology, disease incidence, animal parasite, infective disease

ABSTRACT: The advantages and disadvantages of using local disease and death statistics, data from specialists, random sampling, foreign data, data from single outbreaks, and longitudinal-survey data in estimating the degree of parasite infestation over large areas were presented. Factors affecting the accuracy of epidemiological and medical geographical mapping and evaluation were presented in more detail, and involved primarily limitations in the accuracy of the given survey method. Such limitations were nonuniformity in the population surveyed, variations in emphasis of the many

Card 1/2

ACC NR: AT6031457

surveys incorporated into the report, the difference in susceptibility of various age groups to some diseases, variations in seasonality of both surveys and diseases, and the fact that some data were comparatively recent while other data were quite old. To improve accuracy in parasitology surveys, more coherent standardized plans for taking, recording, and evaluating data were recommended.

[WA-50; CBE No. 12]

SUB CODE: 06/ SUBM DATE: 17Sep65/ ORIG REF: 015/ OTH REF: 031/

Card 2/2

MYCIELSKA, E.

A visit of Professor J. Kunsky in Poland. p. 219. Warszawa
Vol. 28, no. 1, 1956
POLISH INFORMATION AGENCY

SOURCE: East European Accession List (EEAL) Library of Congress
Vol. 5, no. 8, August 1956

MYCIELSKA, Elzbieta

Karstic forms north of Osiek Sandomierski. Przegl geogr 32 no.4:
575-585 '60.
(Poland--Karst)

MYCIELSKA, Elzbieta, (Warszawa)

The most recent methods in granulometric research in Hungary.
Czasopismo geograficzne 32 no.1:77-80 '61.

MICIELSKA-BUDZIAŁA, Elżbieta

Measurements of the degree of rounding of sand grains and
utilization office measurements in geomorphological studies. Prace
geogr 35 no.1:65-76 '63.

JONCA, Edmund; MYCIELSKA-DOWGIALLO, Elzbieta

Age of the carst carters in Smocina. Przegl geogr 35 no.1:95-
100 '63.

Mycielski, Jan

*Mather
plus*
Mycielski, Jan. Generalizations of the theorems on
paradoxical decompositions of the sphere. Bull. Acad.
Polon. Sci. Cl. III, 3 (1955), 199-200.

En se servant d'un résultat de W. Sierpiński [Fund.
Math. 33 (1945), 235-244; MR 8, 140] sur le groupe de
rotations de la sphère, l'auteur discute la décomposition
de la sphère en un nombre transfini de parties disjointes,
et généralise les résultats de R. M. Robinson [ibid. 34
(1947), 246-260; MR 10, 106] et J. F. Adams [J. London
Math. Soc. 29 (1954), 96-99; MR 15, 69]. Les démonstra-
tions de ces résultats seront trouvées dans l'œuvre ana-
lysée ci-dessous.
M. Kondô (Paris).

1-FW
2

Sym
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MYCIELSKI, JAN

✓ Balcerzyk, S.; and Mycielski, Jan. On free subgroups of topological groups. Bull. Acad. Polon. Sci. Cl. III. 4 (1956), 415.

The paper announces the following results: A free group of rank 2^{\aleph_0} appears as a subgroup in 1) every compact, connected, non-abelian group, and 2) every locally compact, connected non-solvable group. A free abelian group of rank 2^{\aleph_0} appears in every locally compact, non-zero dimensional, abelian group.

A. M. Gleason (Cambridge, Mass.)

1. FW

3

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(NYC 1515 E) Jan / 2
Mycielski, Jan. On the decompositions of Euclidean spaces,
Bull. Acad. Polon. Sci. Cl. III. 4 (1956), 417-418.

Three theorems concerning decompositions of E^3 are stated; the proofs are to appear later. The first theorem states that there exist a free group G of rank $\leq 2^K$ of orientation preserving isometries of E^3 such that no isometry in G different from the identity has a fixed point. The following decomposition theorem follows from this. Let M and N be sets of potency $\leq 2^K$. Suppose $\{P_\mu; \mu \in M\}$ and $\{Q_\mu; \mu \in M\}$ are collections of subsets of N distinct from 0 and N . Then there exists a decomposition of E^3 into disjoint sets $\{A_\nu; \nu \in N\}$ such that for each $\mu \in M$ the sets $\sum_{\nu \in P_\mu} A_\nu$ and $\sum_{\nu \in Q_\mu} A_\nu$ are congruent, with the congruence realized by an orientation preserving isometry.
E. E. Floyd.

1. FW

8/26/01

Mycielski, Jan.

2
J. FW

Mycielski, Jan. On the congruence of sets. Bull. Acad. Polon. Sci. Cl. III, 4 (1956), 419-421.

This note is a summary of several results concerning congruence in manifolds; proofs are to be published later.
(1) Let M be an analytic manifold and G a free group of rank 2 of analytic homeomorphisms of M onto itself. Then there exists a countable set $E \subset M$, such that for each finite set $F \subset E$ there exists a homeomorphism $h_F: G$ with $h_F(F) = F - F$. The existence of such a free group of rotations of S^2 is well-known; the author states that the existence of such groups of isometries of the elliptic and hyperbolic planes has been established by T. Dekker. (2) A free group G of rank 2^{\aleph_0} contains a set E such that for any sets A, B which are at most denumerable there exists a $\phi \in G$ with $\phi E = (E - A) + B$. (3) There exists on the sphere S a set E such that $E \cong (E - A) + B$ for any sets $A, B \subset S$ which are at most ω_1 -enumerable.

E. E. Floyd (Charlottesville, Va.).

MYCIELSKI, J.

Mycielski, Jan, Swierczkowski, S.; and Zioba, A. On infinite positional games. Bull. Acad. Polon. Sci. Cl. III. 4 (1956), 485-488.

4
I-FW

In this note the authors announce several results on various infinite games with perfect information. The first games considered are general infinite move games of the type introduced by Gale and Stewart [Contributions to the theory of games, v. 2, Princeton, 1953, pp. 245-266; MR 14, 999]. Among the results announced are: if the winning set S is an F_σ or G_δ , then the game Γ is determined [this was previously proved by Wolfe, Pacific J. Math. 5 (1955), 841-847; MR 17, 506]; if the space of plays is compact and the pay-off function continuous, then Γ is determined (previously proved by Gale and Stewart, *ibid.*); if the pay-off function is of first Baire class, then Γ is determined.

Next they consider the game of Mazur, in which A and B form a partition of $[0, 1]$. The players alternately choose non-degenerate closed intervals, each being a subinterval of the interval previously chosen. Player II wins or loses according as the intersection of the intervals chosen lies in B or not. Theorem: This game is a win for I if and only if B is of first category at some point. It is a win for II if and only if A is of first category.

The final section is devoted to continuous move games, motivated by games of pursuit. A general strict determinate theorem is announced.

D. Gale

MYCIELSKI, J.

"Some of the identities of the analytic theory of numbers. In French."

p. 56 (Colloquium Mathematicum) Vol. 4, no. 1, 1956
Warsaw, Poland

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

MYCIELSKI, J.; PASZKOWSKI, S.

A problem of calculus of probability. In French. p. 188
(*Studia Mathematica*. Vol. 15, no. 2, 1956.)

SO: Monthly List of East European Accessions (EMAL) LC, Vol. 6, no. 7, July 1957, Unclassified

1970, 2.

In the instances between a male P-51 and a female P-51, the male
process. In English, p. 200.
(Continued). Tel. 1, no. 3, 1970, Lancaster, "2nd C."

Sr.: Monthly list of new members of Congress, 1970, 1971, 1972,
1973.

~~1/1~~ Myslinski, Jan. Some theorems on connected compact groups. *Prace Matematyczne* Acad. Polon. Sci. Cl. III. 5 (1957), 1023.

EXCERPT (Russian summary)

Announcement that (1) a compact group G is connected if and only if every element is a k th power for every integer $k > 0$, and (2) all maximal Abelian subgroups of a connected compact group are connected and conjugate.

2

MYCIELSKI, J.

Mycielski, Jan. A characterisation of arithmetical classes. Bull. Acad. Polon. Sci. Cl. III. 5 (1957), 1025-1027, LXXXVI. (Russian summary)

The sentences of a given applied first order calculus which are in prenex normal form can be classified according to number and length of alternate blocks of universal and existential quantifiers in the prefix. Let σ be a particular type of sentences defined in this way, and let K and L be two classes of relational systems (structures). The author states a necessary and sufficient semantic condition for all sentences of type σ which hold in K to hold also in L . The proof and some applications are to be published in Fund. Math. A. Robinson (Jerusalem)

JW
1/1

V Balcerzyk, S.; and Mycielski, Jan. Some theorems on the representations of free products. Bull. Acad. Polon. Sci. Cl. III 5 (1957), 1029-1030, LXXXVI. (Russian summary)

Announcement that (1) if G_ξ ($\xi <$ ordinal number α) is a sequence of groups, each isomorphic to a subgroup of the rotation group R of E^n , and $\sum_{\eta \leq \xi} \text{card } G_\eta < 2^\alpha$ any $\xi < \alpha$, then the free product $\prod^* G_\xi$ is isomorphic to a subgroup of R ; (2) two elements of R with different axes, but common rotation angle φ , freely generate a free subgroup except for denumerably many φ depending on the axes; (3) if the index set T and groups G_t , $t \in T$, have powers $\leq \kappa_{t+1}$, κ_t respectively, then $\prod^* G_t$ is isomorphic to a subgroup of the permutation group of a set of power κ_t .

MYCIELSKI, Jan; PASZKOWSKI, S.

A generalization of Chebyshev polynomials. Bul Ac Pol mat 8 no.7:
433-438 '60.

1. Institute of Mathematics, Polish Academy of Sciences. Presented
by E. Marczewski.

(Chebyshev polynomials)

MYCIELSKI, Jan (Krociew)

Some compactifications of several algebras. Colloquium Mathematicum
64.

I. Institute of Mathematics of the Polish Academy of Sciences.
Submitted March 1, 1984.

MYCIELSKI, Jan. (Wroclaw)

On a problem of interpolation by periodic functions. Col math 8 no.1:
95-97 '61. (EEAI 10:5)
(Functions) (Numbers, Theory of) (Interpolation)

MICIELSKI, Jan (Wroclaw)

Some remarks and problems on the colouring of infinite graphs and
the theorem of Kuratowski. Acta mat Hung 12 no.1/2:125-129 '61.
(EEAI 10:9)

1. Institute of Mathematics, University of Wroclaw, Poland. Presented
by G. Hajos.

(Topology) (Spaces, Generalized)

LELEK, A.; MYCIELSKI, Jan (Wroclaw)

Some conditions for a mapping to be a covering. Fund mat 49 no.3:
295-300 '61.

1. Mathematical Institute of the Polish Academy of Sciences.

BALCERZYK, S. (Torun); MYCIELSKI, Jan (Wroclaw)

On faithful representations of free products of groups. Fund mat 50
no.1:63-71 '61.

8/044/63/000/001/001/053
A060/A000

AUTHORS: Mycielski, Jan, Steinhaus, H.

TITLE: A mathematical axiom contradicting the axiom of choice

PERIODICAL: Referativnyy zhurnal, Matematika, no. 1, 1963, 13, abstract 1A89
(Bull. Acad. polon. sci. Sér. sci. math., astron. et phys., 1962,
v. 10, no. 1, 1 - 3; English; summary in Russian)

TEXT: Let P be some set of infinite words in the alphabet $\{0, 1\}$. The game between the players I and II is thus defined: the players in turn call letters from the alphabet $\{0, 1\}$ so that at the n -th step the letter ϵ_n is called by player I, if n is even and by player II, if n is odd; it is assumed that each player knows the set P and the letters $\epsilon_0, \epsilon_1, \dots, \epsilon_{n-1}$ at the time of calling the letter ϵ_n . If the word $(\epsilon_0, \epsilon_1, \dots) \in P$ then the player I wins, otherwise player II wins. The axiom proposed by the authors instead of the axiom of choice states: for any P one of the players I, II has a winning strategy. The authors promise to publish proof for these propositions: 1) The new axiom, in contradistinction to the axiom of choice, implies that all linear sets possess

Card 1/2

A mathematical axiom contradicting the axiom of choice

S/044/63/000/001/001/053
A060/A000

Ber's property and are Lebesgue-measurable. 2) The new axiom implies the existence of a function which carries out a selection from any denumerable family of sets, whose union has a power less than or equal to 2^{\aleph_0} . The authors discuss the possibility of replacing the axiom of choice by the new axiom in the proof of various theorems on the theory of sets, topology, theory of functions. etc. It is noted that, if the word $\epsilon_0, \epsilon_1, \dots$ is identified with the point

$\frac{\epsilon_0}{3} + \frac{\epsilon_1}{3^2} + \dots$ on the axis of real numbers, then a) the new axiom holds for every $P \subset F_\sigma \cup G_\delta$. b) the new axiom cannot be proven for every $P \notin B_2$ ($B_2 = PCA \cap CPC A$). Moreover, the authors raise doubts as to the validity of the new axiom in the class of Borel sets and even in the class $F_{\sigma\delta} \cap G_{\delta\sigma}$.

F.A. Kabakov

[Abstracter's note: Complete translation]

Card 2/2

BERGMAN, S. (Stanford, California); IUDA, R.; KNASTER, B.; MYCIELSKI,
Jan (Wroclaw); SCHINZEL, A. (Warsaw)

Kazimierz Zarankiewicz May 7, 1902-September 5, 1959, Cracow
ID no. 21277-288 (A.).

MYCIELSKI, Jan

α -incompatness of N^ω . Bul 4; Foc. math. 12 no.8;
437-438 '64.

Two remarks on Tychonoff's product theorem. Ibid.;
439-441

1. Institute of Mathematics of the Polish Academy of
Sciences, Warsaw. Presented by E. Marzewski and A.
Mostowski.

MYCIELSKI, Jan (Wroclaw)

On the Lebesgue measurability and the axiom of determinateness.
Fund math 54 no. 1:67-71 '64.

MYCIELSKI, Jan

On the axiom of determinateness. Fund math 53 no. 2: 205-
224 '64.

1. Institute of Mathematics, Polish Academy of Sciences,
Wroclaw.

MYCIELSKI, Jan (Wroclaw)

Independent sets in topological algebras. Fund math 55 no.2:
139-147 '64

1. Institute of Mathematics (Wroclaw) Polish Academy of Sciences.

MYCIELSKI, Jan (Wroclaw)

On unions of denumerable models. Alg. i log. 4 no.2:57-58 '65.
(MIR 18:8)

1. Instytut Matematyczny Polskiej Akademii Nauk.

Mycielski, Jerzy

2
1-FW

Mycielski, Jerzy. On the distances between signals in the non-homogeneous Poisson stochastic process. Studia Math. 15 (1956), 300-313.

It is supposed that events are occurring in accordance with nonhomogeneous Poisson process, with probability $a(t)h + o(h)$ that an event will occur in the interval $[t, t+h]$. Here $a(\cdot)$ is supposed non-negative and continuous, with $\int_0^\infty a(t)dt < \infty$. Let $\theta_n(y)$ be the number of the first n time intervals between events which are of length $\leq y$, and define

$$S_n(y) = 1 - \frac{1}{n} \int_0^{T_n} a(x) \exp\left(-\int_x^{x+y} a(t)dt\right) dx,$$

where $\int_0^{T_n} a(t)dt = n$. It is proved that

$$|E\{\theta_n(y)\} - S_n(y)| < (2\pi n)^{-1/2}$$

and various conditions are found under which

$$\lim_{n \rightarrow \infty} S_n(y)$$

exists. For example, it suffices that $\lim_{n \rightarrow \infty} \int_{y-n}^{y+n} a(t)dt$ exist ($\leq \infty$), for some $y > 0$. *J. L. Doob* (Geneva).

John Doe

MYCIELSKI, Jerzy

On the mechanism of impurity conduction in semiconductors. I.The activation energy of conductivity. II.The conductivity in the case of strong carrier-phonon interaction. Bul Ac Pol mat 9 no.3:193-205 '61.

1. Institute of Physics, Polish Academy of Sciences. Presented by L. Infeld.

(Semiconductors) (Conductivity, Electric)

MYCIELSKI, S.

The large kudu. Wszechswiat 7/8:178-179 Jl-Ag '64

Myczka, J.

3891

Myczka J. Mechanical Installations for Polishing Crystal Glass in Acids.
"Mechaniczna urządzenia do polerowania szkła kryształowego w
kwasach". Sztuka i Ceramika, No. 6, 1934, pp. 111-114, 3 llgs.

666.286/287 : 621.924

MT

When polishing crystal glass by hand, workers have in the past been exposed to the risk of inhaling hydrofluoric and sulphuric acid vapours and splashing with these acids. These risks are eliminated by the device described in this article, which functions by moving cyclically in a vertical direction and turning 90° at a time in a horizontal plane. All these movements are in strict harmony with each other. In this device, the water and acid mixture in the tanks is heated by steam. The automatic device is charged with 120 kg. glass at a time. The polishing and washing of this quantity of material takes only 40 seconds. The monthly single shift output of the device is 83.4 tons of crystal glass.

MYCZKOWSKA-WILSKA, Eliza

Tuberculosis in old age. Polski tygod. lek. 16 no.47:1817-1820
20 N '61.

1. Z Kliniki Ftyzjatrycznej A.M. w Gdansku; kierownik Kliniki: prof.
dr T. Kielanowski.
(TUBERCULOSIS PULMONARY in old age)